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ABSTRACT

A field based teacher education program, conducted through Kent State University and designed to prepare preservice teachers for urban settings, is the subject of this report. The paper is divided into three sections. In the first, the project is described with emphasis given to student teachers' performance, effectiveness, and role perceptions. The second section consists of a cost analysis comparing the field based project to conventional on-campus teacher education programs. Information is provided regarding the projects earnings/losses, student credit hours produced, income to salary ratios, two year costs, and comparisons with other field based courses taught at Kent State. In the paper's third section, the urban preservice teaching project is analyzed with respect to both historical antecedents and current developments in teacher education. The project is examined from the perspective of (1) nine generic models for teacher education funded by the U.S. Office of Education, (2) the guidelines of the Ohio Redesign for Teacher Education, and (3) the Kent State model for teacher education. In addition, the urban project is considered in light of the "process-product" and "time on task" dimensions of research on teacher education. (Author/GC)

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EDUCATING TEACHERS FOR URBAN SETTINGS

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Purpose of the Study

The purpose of the study was to investigate three aspects of a year long field-based teacher education program that prepared preservice teachers for urban settings. The study focused on: research about the teacher education process and role perceptions; a cost analysis of the project compared to conventional teacher education programs; and the relationship of the project to current research trends in teacher education.

I. An Experimental Teacher Education Project

Purpose of the Project

The project was designed to provide preservice educators the opportunity to combine theory with practical applications in diverse school settings in an urban school district. As such, new objectives, activities, and course offerings were fashioned to bring university faculty, public school educators and students together in a non-traditional program.

Nature of the Field Based Program

The nature of this pilot program differed from the college's traditional program in terms of the type of involvement of the participants, design of the content and format, and supervision activities.

Program Participants. The program participants included university students, public school faculty, and university professors. Twelve regional campus students interned in the project a full academic year and one additional student (also from a regional campus) entered the program at the point of student teaching in the spring. The latter student had interned in the project the previous year, but

had not met the prerequisites for student teaching at that time.

The members of the public school faculty represented three elementary buildings, i.e., the principal and eight teachers in a traditional school; the principal and five teachers in the magnet school; and the principal and nine teachers in the Title I school.

University faculty commuted to an industrial city of 65,000 in northeastern Ohio and taught classes in the Title I building. Faculty consisted of three full-time professors, two temporary part-time faculty members, and two graduate assistants.

Program Design. The program's design allowed students to take methods courses on site (two days per week), and to participate in practicum experiences (two additional days per week) for two quarters. During spring quarter, the interns were engaged in the student teaching experiences. A rotation design built into the practicum permitted students to rotate three times per quarter (fall and winter) to a traditional, a magnet, and a Title I school. Practicum experiences were completed in different grade levels each rotation.

Supervision. Supervision of the interns during practicum and student teaching was conducted by the project director (one of the full-time professors who taught methods courses on site) and a departmental graduate assistant (a former elementary school principal).

Program Evaluation

In order to gain several perspectives of the program, it was evaluated by student interns, teachers, and principals. This evaluation was summative and occurred two weeks prior to the programs completion.

Interns' evaluation. Two survey instruments were used to evaluate the project: an intern evaluation questionnaire and a teachers' and principals' evaluation questionnaire.

Two weeks prior to the end of spring quarter, interns completed a questionnaire consisting of seventeen items (rated on a five-point Likert Scale) and five open-ended questions. Items were categorized into three areas: practicum experiences, course offerings, and student teaching experiences. Open-ended items focused on the program's strengths and weaknesses and the need for additions or deletions.

Findings indicated that the interns generally agreed that the type of practicum and student teaching experiences provided were very positive ones. Ratings on course offerings were generally positive as well. Interns felt the program should be continued and expanded.

Program strengths were identified as serving a one year internship, gaining practical experiences in a variety of grade levels in diverse school settings; observing many different teaching styles, and sharing peer perspectives. Weaknesses cited were the need for integration of method courses and the length and number of rotations (fewer rotations for longer periods of time was suggested).

The interns desired more knowledge and experience in classroom discipline, spcial education, media, and handwriting. Criticisms focused on shortening the participation time in the magnet school and omitting certain segments of course content.

Teachers' and principals' evaluation. A questionnaire consisting of fourteen items (rated on a five-point Likert Scale) and five open-ended questions was completed by teachers and principals. Items centered on practicum experiences, coursework, student teaching, supervision, and the program continuation. Findings indicated that teachers and principals felt that the practicum experiences and supervision of student teachers were program strengths. Feelings toward coursework, while positive, were not as strong. Specified areas for improved preparation of interns were identified and curricular additions were suggested (a handwriting course, more experience with media, etc.). Continuation and expansion of the project were supported and urged.

Research Findings

Because the project departed from the college's traditional preparation of teachers in manners cited earlier, research on the project sought to: identify interns' teaching strengths and weaknesses (following two quarters of practicum experiences); determine interns' effectiveness in each of three diverse settings; and determine interns' perceptions of the teaching role.

Student teaching performance. Upon completion of the fourth week of student teaching, cooperating teachers rated the interns biweekly on an instrument that assessed eighteen characteristics of teaching performance. (The ratings were shared with the interns after each administration). For statistical analyses, the eighteen characteristics were grouped into six logical categories: planning, instruction, personal characteristics, professional characteristics, student and staff relationships, and classroom management and discipline. Content validity was established for each category.

Specifically, this aspect of the research sought to determine, first, which of the six categories were scored highest or lowest on each administration -- an indication of interns' strengths and weaknesses over time -- and second, on which administration each category received its highest score -- an indication of when given categories peak. Such information might provide a basis for redirection in preservice instruction and program emphasis as well as providing a basis for analyzing the effects of extensive field/clinical work prior to student teaching.

The interaction of time and category revealed the growth patterns reflected in Figure 1. Student teachers improved in each category over time.

Initial scores were fairly widespread, (except for exact means on professional characteristics and instruction), but narrowed and/or converged over time. Although student and staff relationships was the strongest characteristic initially -- and remained strong consistently -- by the final administration, professional and personal characteristics were equally as strong as student and staff relationships.

Classroom management and discipline, the weakest characteristic throughout the student teaching experience, showed the most significant gain over time. In summary, then, while there were several significant differences between categories on the initial administration, there were no significant differences between categories on the final administration.

High and low scores of each category over time were computed and significant differences were determined by the Newman Keuhls method for comparison of means. Findings indicated that each category received its lowest score on the final administration. Although all characteristics showed significant differences between the first and final administrations (six weeks later) only classroom management and discipline yielded significant differences when comparing each administrations with the final administration and when comparing growth between administrations.

The data (summarized in Table 1) thus suggests that classroom management and discipline is the weakest area for student teachers initially, but improves significantly over time. Two possible hypothesis for the cause of such improvement can be made. First, improved performance in and interaction of the other categories helped to improve performance in the classroom management and discipline category. Second, the student teachers' improved performance in all other categories allowed them to expend more time on improving classroom management and discipline.

Student teacher effectiveness. In order to determine the effectiveness of each intern in the three diverse settings, teachers and principals who had worked with the interns during the practicum and/or student teaching experience were asked to rate students on various school organizational characteristics using a five-point Likert Scale.

Scores were computed in order to obtain a mean score for each intern in each of the three buildings. Interns were then ranked according to their mean scores in each building; rankings were assigned high, moderate, or low according to a scale. Only one intern was rated generally high in all three settings. One student was

also rated low in all three settings. Other scores were widely discrepant and revealed no clear patterns. It appeared that in this study teacher effectiveness was not as clearly related to organizational characteristics as had been in an earlier study. (Clegg, Anglin and Migra, 1979).

Role perception. During the final six weeks of the student teaching experience, student interns were asked once each week to rank and assign values to five perspectives of teaching, namely: teaching as technique, teaching as personal development of students, teaching as curriculum development, teaching as organizational behavior, and teaching as community action.

Mean ranks and mean values for each perspective were computed weekly and grand means were obtained and ranked. Findings indicated that scores were consistent each week. Teaching as technique and teaching as students' personal development were assigned higher rank and value scores than the other perspectives; teaching as community action received the lowest rank and value scores.

In sum, student teachers perceive teaching as technique and personal development of students as the primary roles of teaching. Community action is not viewed as a major role of the teacher.

Research Questions

Based on the data provided several researchable questions emanate from the conclusions. First, is there an identifiable point where some student teachers can be judged to have the competencies and skills to do an abbreviated student teaching experience? Second, how does the interaction of specific variables over time affect classroom management and discipline? Third, given that the variables interact and affect each other, how can student teachers use their initial strengths to improve their initial weaknesses? Finally, based on their extensive field work prior to student teaching, what skills and competencies do the interns

in the pilot project demonstrate that students not in the program lack?

Conclusions

This study has educational significance for several reasons. First, the findings have implications for colleges and universities seeking to improve existing teacher education programs. This study provides a model for a field-based program which can be evaluated in terms of its curriculum, program design, cost effectiveness, and relationship to current research trends in teacher education.

Second, the study is educationally significant to urban schools educators in that the research findings on student teachers' performance, effectiveness, and role perceptions may have major implications for inexperienced teachers. Moreover, such findings may be of value to experienced teachers who become cooperating teachers and become responsible for directing student teachers' experiences.

Third, because student teachers do not perceive teaching as community action, the study has implications for community organizations as well. More involvement in non-school settings could be provided student interns through field/clinical experiences in community agencies. Thus, the relationship between education that occurs in school and non-school settings could be clarified.

Finally, the study generates many researchable questions that are generalizable to other urban settings. The study also demonstrates the value of a cooperative relationship between a university and an urban school district in providing a laboratory for research in urban teacher education and for promoting a climate in which long term, programmatic research can occur.

Reference

Clegg, A. A., Anglin, L. W. and Migra, E. D. Does School Organization Make a Difference in Preparing Teachers? Improving College and University Teaching, 27 (3), 104-109.

TABLE 1 HIGHEST AND LOWEST CATEGORIES AND SIGNIFICANT DIFFERENCES ON BIWEEKLY ADMINISTRATIONS

	4th week of Student Teaching Administration 1	6th week of Student Teaching Administration 2	8th week of Student Teaching Administration 3	10th week of Student Teaching Administration 4
Highest Category and Significant Differences in Relation to other Categories	SSR significantly different from CMD = $p < .01$ PRC = $p < .05$ INS = $p < .05$ PLA = NSD PEC = NSD	SSR significantly different from CMD = $p < .01$ PRC = NSD INS = NSD PLA = NSD PEC = NSD	PEC significantly different from CMD = $p < .01$ PRC = NSD INS = NSD PLA = NSD SSR = NSD	SSR significantly different from CMD = NDS PRC = NSD INS = NSD PLA = NSD PEC = NSD
Lowest Category and Significant Differences in Relation to other Categories	CMD significantly different from SSR = $p < .01$ PEC = $p < .01$ INS = $p < .01$ PRC = $p < .01$ PLA = $p < .01$	CMD significantly different from SSR = $p < .01$ PEC = $p < .01$ INS = $p < .01$ PRC = $p < .01$ PLA = $p < .01$	CMD significantly different from SSR = $p < .01$ PEC = $p < .01$ INS = $p < .05$ PRC = $p < .05$ PLA = NSD	CMD significantly different from SSR = NSD PEC = NSD INS = NSD PRC = NSD PLA = NSD

Key:

NSD = No Significant Difference

Categories:

1. SSR = Student and Staff Relationship
2. PEC = Personal Characteristics
3. PLA = Planning
4. INS = Instruction
5. CMD = Classroom Management and Discipline
6. PRC = Professional Characteristics

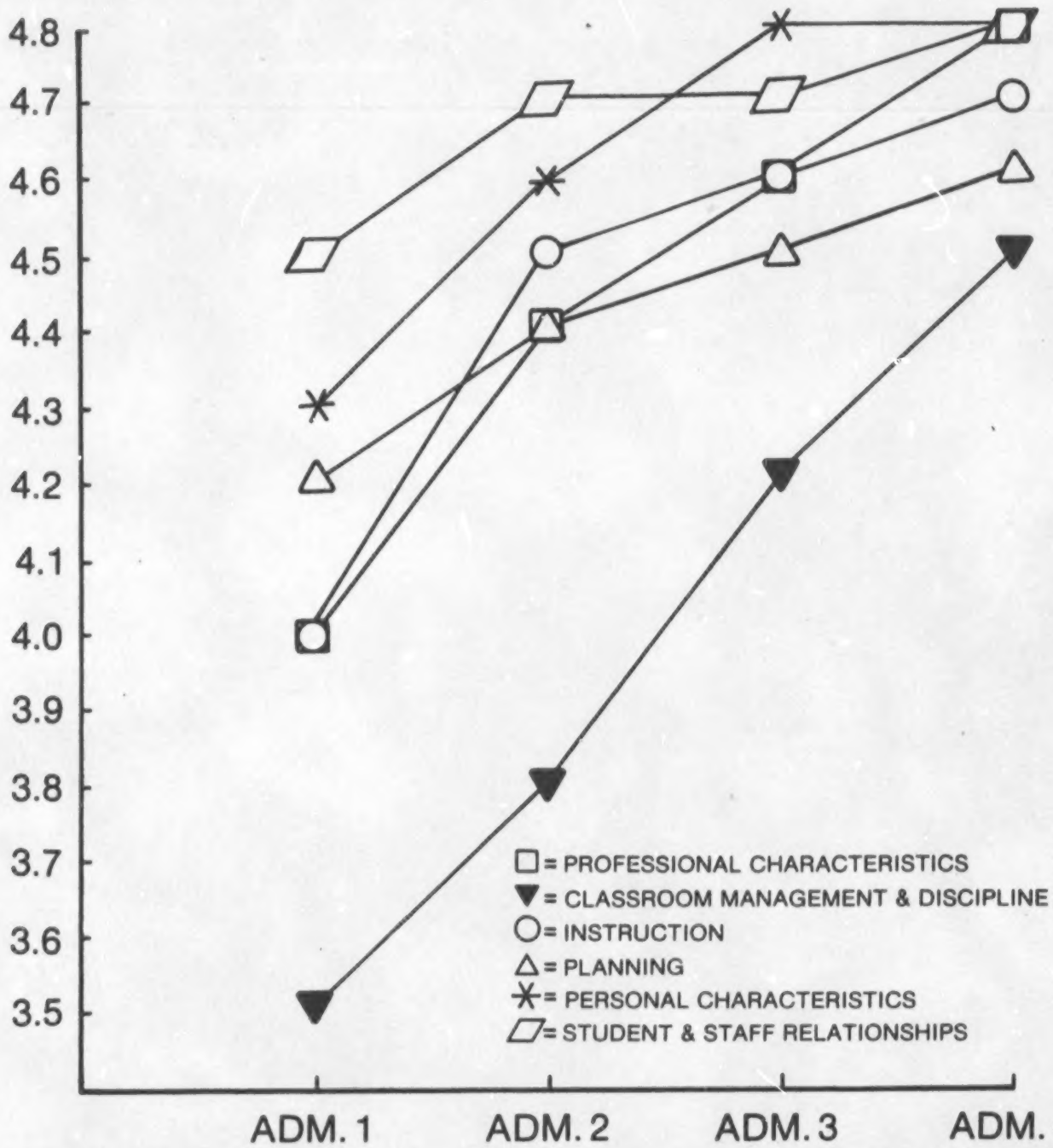

FIGURE 1 INTERACTION OF TIME & CATEGORY ON GROWTH PATTERNS

II. Cost Analysis of a Field Based Teacher Education Program*

Despite the very large literature on field-based programs, there appears to be little data on comparative cost analysis, cost effectiveness, or cost benefit of such programs. Similarly, the mandates in the Ohio Redesign for Teacher Education which require a 100% increase (300 clock hours) in field and clinical experiences prior to student teaching, and a ratio of fourteen students to one supervisory staff member, were not based on any projection of costs to the participatory schools and colleges of the State. The purpose of this section is to provide a summary and analysis of actual costs incurred in conducting a field-based teacher education program in an industrial city of 65,000 population for the past years, 1977-78 and 1978-79. Comparisons were also made with field-based courses taught by the Department of Elementary Education as part of its regular offerings on the Kent Campus during the same period. The data presented here may serve as a yardstick for evaluating the cost effectiveness and ultimately the cost benefit of the field-based program. It may also serve as a useful reference point in planning for the much more extensive field and clinical programs envisioned as part of the Ohio Redesign for Teacher Education.

This section is organized to provide summary information about earnings, student credit hours produced, income-to-salary ratios, a two-year summary of costs for the field-based program, and a table of comparisons with other field-based courses taught on the Kent Campus. All data was derived from official instructor and department income profiles prepared by the University's Management Information Service.

Earnings and Loses

To use the accountant's popular cliche, the bottom line is that field-based

*Appreciation is expressed to Madeline Mathis, who compiled the statistical data reported in Table 2 - 5.

teacher education programs such as the Urban Project are expensive! As shown in Table 2, the Project ran at a net loss of $5,203 for 1977-78. The following year, however, the Project earned a net profit of $5,298. The principal reasons for the losses are the relatively high salaries of some of the participating faculty and the low enrollment of only twelve to fourteen students in the Project. The profits in the year, 1978-79, stem largely from the increased student credit hours generated in the Fall of 1978 when a three-credit practicum was required for all participating students. This additional credit generated was probably the most significant factor in making the difference between earnings and losses. For the purpose of this report, earnings are defined as income minus salaries and travel costs. In almost every case during the fall quarters, the subsidy generated from the State exceeded salary plus travel costs. In the winter and spring quarters, however, income based on tuition and fees seldom exceeded the cost of salary and travel. These are defined as instructional losses.

It is also important to consider that part of the "losses" in a project such as this are accounted for by the costs of supervision (in this case, performed by a graduate assistant) and the release time provided to the director of the Project for administration, liaison with the public schools, and for the conduct of research and evaluation studies. These overhead services cost a total of $8,317 in 1977-78 and $8,861 in 1978-79.

Income/Salary Ratio

Another conventional measure of cost analysis used by universities is the income-to-salary ratio. This figure is used as a standard means of analysis for individual professor and department profiles. It is a useful measure for determining the extent to which a department, a program, or a series of courses is earning its own way based on income generated and salaries paid. The higher

Table 2

Urban Project Earnings & Losses, 1977-1979

	77-78		78-79	
	Earnings	Losses	Earnings	Losses
Fall	8,258		17,570	
Winter		8,623		7,131
Spring		4,838		5,141
TOTAL	8,258	13,461	17,570	12,272

	77-78	78-79
EARNINGS	8,258	17,570
LOSSES	13,461	12,272
TOTAL	(- 5,203)	+ 5,298

the ratio, the "better" the picture of earnings. While the I/S ratio is not an infallible gauge for determining the total worth or value of a program it is one of several standard measures used throughout the university for analyzing income productivity.

Income figures for the Fall quarter include the yearly earnings from State subsidy. The Winter and Spring quarters include only the direct income from tuition and fees. Thus, Fall income data should be almost three times greater than Winter or Spring data.

As a general rule, I/S ratios for an average faculty member should range from 3.0 to 4.0 during the Fall quarter if the university is to at least cover salary costs during the year. The Fall I/S ratio should probably range from 5.0 to 6.5 if all other department and/or college overhead costs (e.g. Instructional Resource Center, University School, etc.) are to be considered. This broader concept is called the Income/Cost (I/C) ratio and is another standard measure used by the university to analyze costs. Because the Urban Project represented only a portion of departmental efforts, no attempt was made to allocate proportionate overhead costs to the project for other than supervision and administration.

Income/salary ratios (I/S) for faculty who participated in the Urban Project are summarized in Table 3. The mean annual I/S ratio for 1977-78 was .85 and 1.28 for 1978-79. Thus, the project barely broke even with an average I/S ratio of 1.07 for the two years studied.

Since travel costs are an essential part of the Project, they were figured in an adjusted I/S+T ratio. In most cases, the travel costs are relatively small and the impact upon the I/S ratio is negligible. Travel averated about 9% of total salary costs in both years.

In general, I/S ratios for the Urban Project courses ran considerably lower (i.e. more costly) than those for other departmental faculty teaching field-

Table 3

Quarterly Summary of Costs for Urban Project for Two Years, 1977-78 and 1978-79

	Credits[1]	Regist.[1]	SCH	Income	Salary Cost	I/S Ratio	Travel	Instructional Profit	Instructional Loss	Overhead Superv.	Overhead Admin.	Earn Per SCH	Cost Per SCH	TOTAL Profit	TOTAL Loss
Fall, 1977	15	12	183	20,303	11,098	1.83	947	12,491		1,837	1,396	45.12		8,258	
Winter, 1978	14	14	202	3,118	10,904	.29	786		5,440	1,787	1,787		42.68		(8623)
Spring, 1978	15	14	210	3,033	7,261	.42	710		2,937	1,901			23.03		(4838)
Grand Total 77-78	44	13.3	595	26,454	29,163	.85	2,443	11,491	8,377	5,525	3,183		8.7		(5203)
Fall, 1978	18	14	258	30,236	11,694	2.6	972	21,032		1,891	1,571	68.1		17,570	
Winter, 1979	17	9	152	2,531	8,616	.29	1,046	112	3,977	1,695	1,571		46.9		(7131)
Spring, 1979	15	13	195	3,315	7,861	.42	595		3,188	1,953			26.4		(5141)
Grand Total 78-79	50	12	605	36,082	28,171	1.28	2,613	21,144	7,165	5,539	3,142	8.8		5,298	

[1]Average

based courses on the Kent Campus. A comparison of I/S ratios may be made by examining the data in Table 4. The I/S ratio for comparable Kent-based courses during the Fall quarters ranged from 3.5 to 4.8. The mean I/S ratio for 1977-78 was 1.81 and 1.70 for 1978-79, with an average I/S ratio of 1.76 for the two years studied.

The two-year overall mean I/S ratio for the Urban Project was 1.07 and 1.76 for the Kent Campus field-based courses. These low I/S ratios raise serious questions about how field-based projects are to be staffed. The participation of relatively high-paid faculty members in instructional programs that generate only modest numbers of student credit hours results in very expensive programs. The normal enrollment for most undergraduate courses is a minimum of 20 to 25. An enrollment ratio of 14:1 in field and clinical courses required by the Ohio Redesign simply cannot generate enough student credit hours to produce I/S ratios in the favorable ranges described above.

The field-based courses taught as department offerings on or near the Kent Campus appear, at first glance, to be more cost effective. Their enrollments were substantially higher than those in the Urban Project and they did not have overhead costs of travel, supervision, or administration. On the other hand, each of the courses represented a different level of participation with pupils in the schools and differing levels of supervision and contact with public school teachers and administrators. A major shortcoming is the lack of any research or evaluative data regarding the progress of students during these field-based courses. College students also worked in schools, including the University School, in which the pupils were predominantly white, middle-class suburban children. In this respect, college students did not have opportunities to work with culturally different children in an urban area. In short, there were substantial qualitative differences in the two groups and this must be considered in addition to cost alone.

Table 4

Mean I/S Ratios for Field-Based Courses, 1977-78 and 1978-79

Year/Quarter		Urban Project	Kent Campus
1977-78	Fall 77	1.83	4.02
	Winter 78	.29	.68
	Spring 78	.42	.72
Mean 1977-78		.85	1.81
1978-79	Fall 78	2.60	3.75
	Winter 79	.29	.64
	Spring 79	.49	.72*
Mean 1978-79		1.28	1.70
Grand Mean 1977-79		1.07	1.76

*Estimated based upon Spring 1978 data

Overhead Costs

This section deals with such overhead costs as travel, supervision, and project administration.

Travel. The three schools used as part of the Urban Project were in the center of the city and averaged about 37 miles one way from the Kent Campus. Thus, most participating faculty members averaged about 75 miles round trip per journey. During 1977-78, travel costs were $2,443; for 1978-79 they amounted to $2,613. This averages about 6.8% of the total salary costs for the two year period (See Table 5). These represent relatively modest costs, given the distance involved. It appeared that the best comparative index is to figure travel as a percentage of instructional salaries. This comes closer to reflecting the true cost of the program since income varies with the particular quarter. Travel expenses might have been reduced if faculty members traveled as teams using a single car and sharing rides, but this was often impossible because of the faculty members' other University schedules on the Kent Campus. No travel funds were used to transport students nor were they reimbursed for any of their own personal mileage expenses.

Supervision. An important facet of the Urban Project was the degree of supervision provided by both the Director of the Project and a full-time doctoral-level graduate assistant employed for this purpose. In 1977-78, the graduate assistant was a qualified teacher who also had supervisory experience. In 1978-79, the graduate assistant was a doctoral-candidate who had considerable teaching experience in urban settings, experience as a supervisor, and experience as an elementary school principal. In both years, the supervisor provided extensive liaison with the building principals and classroom teachers as well as visiting students in their classes and providing supervisory conferences. The supervisor visited each of the 14 students at least once a week and where the intern was having difficulties, more frequently.

Table 5

Summary of Overhead Costs of Urban Project and Percent of Salaries, Two-year period, 1977-78 and 1978-79

	Travel	%	Super-vision[a]	%	Admin[a]	%	Total Salaries
1977-78	2443	8.3	5525	18.9	3183	10.9	29,163
1978-79	2613	9.2	5539	19.6	3142	11.1	28,171
Average 1977-79	2528	8.8	5532	19.3	3163	11.0	28,667

[a]includes salaries plus travel

This level of supervision approximated the ratio of 14:1 expected in the Ohio Redesign. The costs of supervision, including travel were $5,525 for 1977-78 and $5,539 for 1978-79 (see Table 5). This amounts to about 19% of the cost of salaries. The quality and the intensity of supervision was valued very highly in the ratings by interns and by participating teachers and principals, as indicated in the evaluation report of this project.

Administration

Another important overhead cost was administration. Throughout the Urban Project, the director was customarily given 25% release time (three quarter credits) from other instructional duties in order to administer the project, coordinate all activities with the schools, and conduct evaluation and research studies.

The administrative costs for 1977-78 were $3,183 and were $3,142 for 1978-79. These average approximately $266 per student or about 11% of instructional costs (see Table 5). At first glance, these costs for administration appear to be high, although there is no comparative yardstick. Yet, the formal allocation of time for the faculty member directing the project is one way of insuring accountability for the high degree of coordination necessary, and for the expectation that a complex evaluation study is to be completed. It also has provided a modest amount of time and expectation that research studies will be undertaken and the results presented in the form of professional papers and scholarly articles. As to the director's workload, the number of interns was small and it seems feasible that the figure could be increased from an average of 14 to 20 or 25 without creating an undue administrative burden. Working with three schools in a single district is probably a reasonable limit for a faculty member on ¼ time assignment to coordinate between three different schools each with different organizational characteristics and student populations. On balance, the results achieved appear to justify the administrative

costs.

In summary, overhead costs for supervision and administration (including related travel) amounted to 30% of the total cost for salaries during the two-year period. A summary of these costs is provided in Table 4.

In-Kind Services: Cost/Value

The school district also gained a number of benefits. It had a role in planning and participating in a comprehensive teacher education program. The school district also received the services of the interns throughout the year. While their role in the Fall and Winter quarters was that of observer/participant, in many cases, they performed the functions of a teacher aide and thus made a contribution in kind. During the spring quarter the interns served as student teachers and made considerable contribution as experienced assistant teachers to the classroom. Teacher aides in that district are paid an average salary of $8,000. Accordingly, if the interns' services were considered as being equal to 50% of that of experienced teacher aides, the interns' equivalent earned salary might be approximately $4,000 per student of $56,000 for the group. Thus, the urban city schools "gained" contributed services worth about $112,000 over the two-year period 1977-79. In return, they provide KSU with an outstanding laboratory for college students to learn about teaching in an urban environment, a feature the University could not duplicate.

Lastly, another important benefit, whose worth is difficult to calculate, has been the conduct of research studies referred to earlier in this report. They have important value, not only for the new knowledge they have developed about the process of student teaching, but they have also set an important model of what can be done with a little extra effort, by faculty members engaged in supervision of student teachers and other field components.

Summary and Conclusions

This study has provided a descriptive analysis of the costs of operating

a field-based teacher education program for two years, 1977-79. It has analyzed the data using such measures as income to salary ratio, student credit hours generated, and the relation of overhead costs (travel, supervision and administration) to total salary costs. Some conclusions that may be drawn are:

1. Compared to traditional University modes of teaching, field-based programs are expensive to operate.
   a. The Urban Program barely paid for itself with an average I/S ratio of 1.08 over two years.
   b. Other types of field-based programs offered by the Elementary Education Department in the Kent area, which had more students and no provisions for supervision or administration, had an average I/S ratio of 1.76.
   c. Conventional lecture/discussion classes have an I/S ratio that is three to four times higher than the field-based programs.
2. Overhead costs must be recognized and identified as planned budget items. In the Urban Project overhead costs amounted to nearly 40% of the total cost of salaries. This included: (a) faculty travel, 9%; (b) supervision, 19.3%; and (c) project administration, 11%.
3. Since the State subsidy formula is based on the number of student credit hours generated, students should carry a credit load which accurately reflects both instructional courses and supervised field work. The addition of a three-credit practicum during Fall and Winter quarters 1978-79 accounted for the difference between a $5,203 net loss in 1977-78 and a $5,298 net gain in 1978-79. This brought student load up to a maximum of 18 quarter credits.
4. Services provided "in-kind" also have monetary value. Over the two-year period the interns provided the equivalent of $104,000 in service as experienced and well qualified teacher aides to the Urban City Schools. In return the schools provided the university an outstanding laboratory for

the interns to learn about teaching in an urban setting, a feature the university could not duplicate.

III. Research in Teacher Education: The Urban Project in Perspective

In the concluding phase of this paper it is important to analyze the Urban Project with respect to its historical antecedents as well as current developments in teacher education. The Urban Project will be examined from the perspective of (a) nine generic models of teacher education funded by the U.S.O.E., (b) the guidelines of the Ohio Redesign for Teacher Education, and (c) the Kent State model for teacher education.

In the second part the Urban Project will be reviewed in light of two major dimensions of research on teacher education: process-product studies and time-on-task studies.

U.S.O.E. Generic Models of Teacher Education

In 1968, the U. S. Office of Education funded nine major planning documents which were to act as generic models for teacher education in the 1970's and 80's.[1] The Urban Project, initially begun in 1973, and the guidelines for the Ohio Redesign of Teacher Education (1975) have included many of the directions set down in these nine models.

Field and Clinical Experiences. Perhaps the most important assumption inherent in all nine models was that field and clinical experiences needed to play a greater part in future teacher education programs. The 1978-79 Urban Project emphasized this by offering 200 clock hours in practicum prior to student teaching. Much of this time was spent in actual teaching of school pupils, individually, or in small groups. The project supervisors found that many initial anxieties among interns had been overcome during the fall and

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[1] These models were developed at the Universities of Georgia, Pittsburgh, Florida State, Massachusetts, Syracuse University, Michigan State, Columbia University, Toledo, and the Northwest Regional Laboratory.

winter practicums. Due to the extended practicums, the interns eagerly looked forward to the student teaching phase of the project.

Teaching Models. Another assumption found in several of the U.S.O.E. models was that teachers needed a variety of teaching models from which to choose over the course of the day. The Urban Project, while not addressing itself specifically to that issue, did expose students to different teaching styles within different educational settings; i.e. a Title I, a Magnet and a Traditional school. Thus, students were able to form their own eclectic model from observations and participation of a number of different personalities and teaching styles.

Multicultural Education. A third assumption reflected in the U.S.O.E. models and also present in the Urban Project was the emphasis that future teachers would be functioning in a pluralistic society. The Urban Project addressed itself to this assumption from its inception by placing its students in three different settings. Interns learned to work with pupils from different socio-economic classes and races.

Relationship of School and Community. Another theme emphasized by two of the U.S.O.E. models (Teacher's College, Columbia and Florida State) was the involvement of the school and teachers in community activities and in the work of community agencies. Throughout the year the Urban Project interns were exposed to various community and school agencies, (e.g. Social Studies Methods and School and Society), emphasizing that theme. In the research findings on teacher tasks, the interns consistently ranked participation in community activities as lowest in rank and value. Obviously, this theme needs some considerable attention or review if it is to become an effective component of future teacher education programs.

Internships. Several of the U.S.O.E. models (Toledo, Michigan State and Syracuse) included internships during the fourth year, much like the present

year-long program in Warren.

The Syracuse model presented a unique "internship" experience in which two of its graduates were "co-teachers" during the fifth year. Perhaps something of this nature has implications for research for the Urban Project interns. As mentioned previously, some interns appear to possess the necessary competencies to exit early from the traditional student teaching experience. If several such interns could be identified it might be possible to let them co-teach a grade level the last five weeks of a semester. Quite possibly these interns could fill a need created by a sabbatical or leave-of-absence.

Faculty Role. Most of the U.S.O.E. models emphasized the need for university faculty to play a larger role in counseling student. This was not a priority item in the Urban Project. Because of other commitments and pressures, some college faculty spent very little time in Urban other than teaching their classes. More articulation needed to take place among faculty members to insure greater integration of subject matter between courses and the practicum experiences.

Overall, many of the key features of the generic models funded by the U. S. Office of Education were very much in evidence in the philosophy of the Urban Project.

The Ohio Redesign of Teacher Education

In many ways the Urban Teacher Education Project anticipated many of the concepts of the Ohio Redesign for Teacher Education. New standards for training were outlined in a bulletin prepared by the Ohio State Department of Education, Standards for Colleges or Universities Preparing Teachers (1975) which mandated that teachers be prepared in the following specific areas: teaching of reading, the use of media, human relations, managing behavior problems, clinical use of diagnostic instruments, and early and systematic experiences in urban, suburban, or rural schools.

Within the scope of the Urban Project many of these mandates had already been met, particularly in the area of field experiences. The Project was particularly strong in the area of human relations, since it included a course in Multi-Cultural Education on site as well as placing interns in classrooms with different racial settings. The mandate of placing students in urban and suburban settings has also been addressed in the Project because of the three types of school settings used within the Project.

KSU Model of Teacher Education. It is interesting to note the role of the teacher in the KSU Redesign Model as compared to the year end recommendations of Urban Project student interns. The Kent State model defines the role of the teacher as scholar, interactor, instructor and decision-maker. Yet interns recommended that more of the highly technical skills be included in the Urban Project, e. g. hand-writing workshops and use of visual aids. It appears that in order to fully appreciate the "intern" (fourth) year, neophyte teachers need to experience Phases I and II (Exploration of Self and Education and foundational dimensions of teaching) in the Kent State Redesign because it is in these two phases that a number of philosophical foundations are to be developed. The Urban Project seems to blend well with Phases III, IV, and V of the Redesign. However, the precautions must be taken not to turn out highly proficient technicians who have neglected the scholarly pursuits of their education. They must be given the opportunity to grow as scholars as well as to grow as classroom teachers.

Research Questions. A number of research questions might be posed that could be investigated in a field-based setting such as the Urban Project. Previous studies in the Project have focused on organizational variables. The time has come, however, to change the focus of the research to studying intern effective-

ness, i.e. time on task as it related to pupil achievement. Some important variables reported by Medley (1979) were: a) measures of teacher effectiveness based on pupil learning, b) measures of teacher behavior based upon pupil learning and c) information about teacher's intention or purpose.

Given these variables we might ask, what behaviors that are used by effective teachers contribute most to student achievement? How can these be applied to teacher education programs during the intern year? How effectively is theory being incorporated in Phases I, II, and III of the Redesign? How effective is the application in the field and clinical setting? Will increased instruction in classroom management produce more time on task and greater student achievement?

Another important area is follow-up studies of graduates. In what areas do they excel? Can this be attributed to increased field experiences in the Urban Project? Are evaluative perceptions of cooperating teachers, principals and supervisors valid? Do the highly rated interns turn out to be highly rated teachers? If at least some these questions are pursued in the near future, we will be taking an important step forward and hopefully advancing what Gage (1978) has called "the scientific basis for the art of teaching."